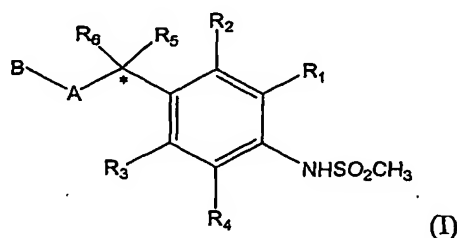


WO 2005/003084

PCT/KR2004/001641

CLAIMS

1. A compound represented by the following general formula (I), the pharmaceutically acceptable salt or the isomer thereof:



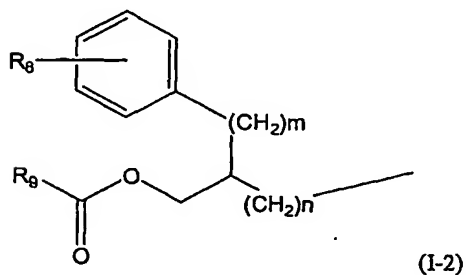
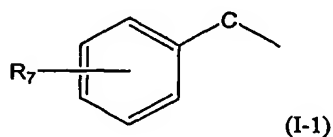
wherein,

A is CONH, NHCO, NHC(=S)NH, NHC(=O)NH;

R₁ to R₄ is independently at least one selected from a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, five or six- member heterocyclic ring;

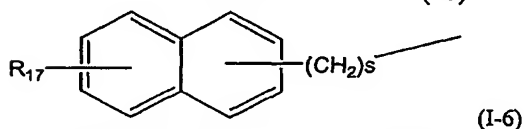
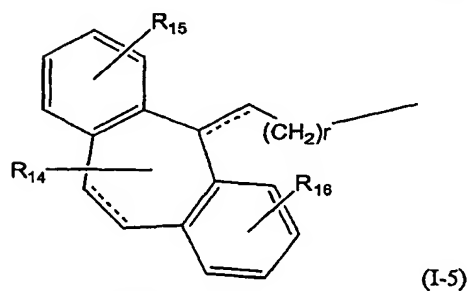
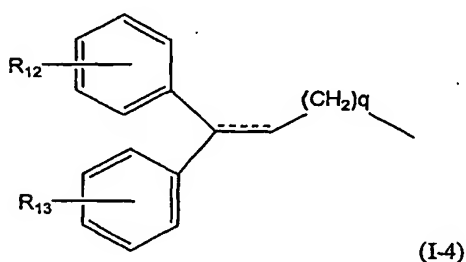
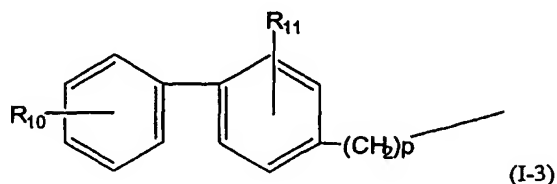
R₅ and R₆ is independently at least one selected from a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms and phenyl or benzyl group optionally substituted with at least one selected from halogen atom, amine group and alkyl group having 1 to 6 carbon, providing that both of R₅ and R₆ are not hydrogen atom simultaneously;

B is a group selected from



WO 2005/003084

PCT/KR2004/001641



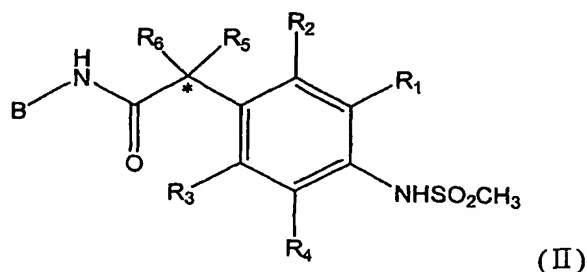
in which R_7 to R_{17} is independently at least one selected from a hydrogen, halogen atom and straight or branched alkyl group having 1 to 6 carbon atoms optionally substituted with more than one halogen atom, C is a group selected from alkyl, alkenyl and alkynyl group having 1 to 5 carbon atoms which may includes one or more heteroatoms, m, n, p, q, r and s is an integer of 0 to 3;

an asteric mark * and (-----) mark indicate a chiral carbon atom, and double bond or single bond chain respectively.

2. The compound according to claim 1 represented by the following general formula (II), the pharmaceutically acceptable salt or the isomer thereof:

WO 2005/003084

PCT/KR2004/001641



wherein,

R_1 to R_4 is independently at least one selected from a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, five or six- member heterocyclic ring;

R_5 and R_6 is independently at least one selected from a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms and phenyl or benzyl group optionally substituted with at least one selected from halogen atom, amine group and alkyl group having 1 to 6 carbon, providing that both of R_5 and R_6 are not hydrogen atom simultaneously;

B is a group selected from the group (I-1) to (I-6) defined in general formula (I) as set forth in claim 1;

the asteric mark * indicates a chiral carbon atom.

3. The compound according to claim 2 wherein said compound is at least one selected from the group consisting of;

N-(4-*tert*-butylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(1-51, KMJ-372), N-(4-*tert*-butylbenzyl)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide(1-52, KMJ-470), N-(4-*tert*-butylbenzyl)-2-[3-bromo-4-(methylsulfonylamino)phenyl]propionamide(1-53, SH-173), N-(4-*tert*-butylbenzyl)-2-[3-iodo-4-(methylsulfonylamino)phenyl]propionamide(1-54, SH-168), N-(4-*tert*-butylbenzyl)-2-[3,5-difluoro-4-(methylsulfonylamino)phenyl]propionamide(1-55, SH-285), N-(4-*tert*-butylbenzyl)-2-[3-cyano-4-(methylsulfonylamino)phenyl]propionamide(1-56, SH-219), N-(4-*tert*-butylbenzyl)-2-[3-(*tert*-butoxycarbonyl-4-(methylsulfonylamino)phenyl]propionamide(1-57, KMJ-806), N-(4-*tert*-butylbenzyl)-2-[3-carboxyl-4-(methylsulfonylamino)phenyl]propionamide(1-58, KMJ-788), N-(4-*tert*-

WO 2005/003084

PCT/KR2004/001641

butylbenzyl)-2-[3-methoxycarbonyl-4-(methylsulfonylamino)phenyl]propionamide(1-59, KMJ-838), N-(4-*tert*-butylbenzyl)-2-[3-(benzylamino)carbonyl-4-(methylsulfonylamino)phenyl]propionamide(1-60, KMJ-836), N-(4-*tert*-butylbenzyl)-2-[3-piperidino-4-(methylsulfonylamino)phenyl]propionamide(1-61, YS-65), N-(4-*tert*-butylbenzyl)-2-[3-morpholino-4-(methylsulfonylamino)phenyl]propionamide(1-62, YS-49), N-(4-*tert*-butylbenzyl)-2-[3-(N-Boc)piperazino-4-(methylsulfonylamino)phenyl]propionamide(1-63, YS-76), N-(4-*tert*-butylbenzyl)-2-[3-piperazino-4-(methylsulfonylamino)phenyl]propionamide(1-64, YS-79), N-(4-*tert*-butylbenzyl)-2-[3-methoxy-4-(methylsulfonylamino)phenyl]propionamide(1-65, CHK-717), N-(4-*tert*-butylbenzyl)-2-[2-fluoro-4-(methylsulfonylamino)phenyl]propionamide(1-66, KMJ-708), N-(4-*tert*-butylbenzyl)-2-[2-chloro-4-(methylsulfonylamino)phenyl]propionamide(1-67, KMJ-698), N-(4-*tert*-butylbenzyl)-2-[4-(methylsulfonylamino)phenyl]propionamide(2-7, KMJ-750), N-(4-chloro)-2-[4-(methylsulfonylamino)phenyl]propionamide (2-8, YS-85), N-(3,4-dichloro)-2-[4-(methylsulfonylamino)phenyl]propionamide (2-9, YS-97), N-(4-*tert*-butylbenzyl)-(2*S*)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(3-5, SU-834), N-(4-*tert*-butylbenzyl)-(2*R*)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(3-6, SU-824), N-(4-chlorobenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-1, SH-291), N-(4-chlorobenzyl)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide(4-2, SH-290), N-(4-chlorobenzyl)-2-[3-bromo-4-(methylsulfonylamino)phenyl]propionamide(4-3, SH-335), N-(3,4-dichlorobenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-4, SH-94), N-(3,4-dichlorobenzyl)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide(4-5, SH-286), N-(3,4-dichlorobenzyl)-2-[3-bromo-4-(methylsulfonylamino)phenyl]propionamide(4-6, SH-337), N-(4-methylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-7, SH-351), N-(4-isopropylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-8, KMJ-928), N-(4-methoxybenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-9, SH-353), N-(4-trifluoromethylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-10, SH-93), N-(4-phenylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-11, KMJ-498), N-(1-naphthylmethyl)-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-12, SH-92), N-(1,2,3,4-tetrahydro-1-naphthalenyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-13, SH-112), N-[2-(4-*tert*-butylphenyl)ethyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-14,

WO 2005/003084

PCT/KR2004/001641

KMJ-374), N-[3-(3,4-dimethylphenyl)propyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-15, SU-770), N-[3-(3,4-dimethylphenyl)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-16, SU-774), N-[3-(3,4-dimethylphenyl)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-17, SU-776), N-[3-(3,4-dimethylphenyl)-2-prophenyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-18, KMJ-686), N-[3-(4-chlorophenyl)propyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-19, KMJ-518), N-[3-(4-chlorophenyl)-2-prophenyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-20, KMJ-732), N-benzyloxy-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-21, SH-109), N-(benzhydryl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-22, SH-130), N-(2,2-diphenylethy)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-23, SH-116), N-(3,3-diphenylpropyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-24, KMJ-378), N-(3,3-diphenyl-2-prophenyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-25, KMJ-724), N-[3,3-di(4-methylphenyl)-2-prophenyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-26, KMJ-908), N-[3,3-di(4-fluorophenyl)-2-prophenyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-27, SH-135), N-[2-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yliden)ethy]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(4-28, SH-199), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[4-(methylsulfonylamino)phenyl]propionamide(5-1, CHK-512), N-[2-(4-*tert*-butylbenzyl)-3-pivaloxypropyl]-2-[4-(methylsulfonylamino)phenyl]propionamide(5-2, CHK-514), 2-[3-fluoro-4-(methylsulfonylamino)phenyl]-N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]propionamide(5-3, SU-542), 2-[3-fluoro-4-(methylsulfonylamino)phenyl]-N-[2-4-*tert*-butylbenzyl)-3-pivaloxypropyl]propionamide(5-4, SU-564), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[3-methoxy-4-(methylsulfonylamino)phenyl]propionamide(5-5, CHK-479), N-[2-(4-*tert*-butylbenzyl)-3-pivaloxypropyl]-2-[3-methoxy-4-(methylsulfonylamino)phenyl]propionamide(5-6, CHK-499), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide(5-7, KNJ-472), N-[2-(4-*tert*-butylbenzyl)-3-pivaloxypropyl]-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide(5-8,

WO 2005/003084

PCT/KR2004/001641

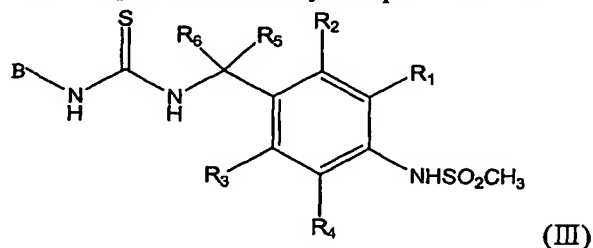
KMJ-690), N-[(1R)-1-benzyl-2-(pivaloxy)ethyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-1, SU-730), N-[(1S)-1-benzyl-2-(pivaloxy)ethyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-2, SU-634), N-[(1S)-1-benzyl-2-(pivaloxy)ethyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-3, SU-636), N-[(1R)-1-benzyl-2-(pivaloxy)ethyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-4, SU-728), N-[(2R)-2-benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-5, SU-826), N-[(2S)-2-benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-6, SU-830), N-[(2S)-2-benzyl-3-(pivaloxy)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-7, SU-838), N-[(2R)-2-benzyl-3-(pivaloxy)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-8, SU-818), N-[(2R)-2-(4-*tert*-butyl)benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-9, MK-271), N-[(2S)-2-(4-*tert*-butyl)benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-10, MK-272), N-[(2S)-2-(4-*tert*-butyl)benzyl-3-(pivaloxy)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-11, MK-450), N-[(2R)-2-(4-*tert*-butyl)benzyl-3-(pivaloxy)propyl]-(2R)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]propionamide(6-12, MK-452), N-[(2R)-2-(4-*tert*-butyl)benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide(6-13, MK-453), N-[(2S)-2-(4-*tert*-butyl)benzyl-3-(pivaloxy)propyl]-(2S)-2-[3-chloro-4-(methylsulfonylamino)phenyl]propionamide(6-14, MK-451), 2-[3-fluoro-4-(methylsulfonylamino)phenyl]-2-methylpropion acid(7-4, CHK-624), 2-[4-(methylsulfonylamino)phenyl]-2-methylpropion acid(8-11), 2-[3-methoxy-4-(methylsulfonylamino)phenyl]-2-methylpropion acid(8-12), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-1, CHK-520), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-2, CHK-543), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-2-[3-methoxy-4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-3, CHK-493), N-[3-(3,4-dimethylphenyl)propyl]-2-[4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-4, CHK-591), N-[3-(3,4-dimethylphenyl)propyl]-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-5, CHK-656), N-[3-(3,4-dimethylphenyl)propyl]-2-[3-methoxy-4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-6, CHK-600), N-(4-*tert*-

WO 2005/003084

PCT/KR2004/001641

butylbenzyl)-2-[4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-7, CHK-715), N-(4-*tert*-butylbenzyl)-2-[3-fluoro-4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-8, CHK-655), N-(4-*tert*-butylbenzyl)-2-[3-methoxy-4-(methylsulfonylamino)phenyl]-2-methylpropionamide(9-9), 1-[3-fluoro-4-(methylsulfonylamino)phenyl]cyclopropan carboxylic acid(10-5), 1-[4-(methylsulfonylamino)phenyl]cyclopropan carboxylic acid(11-7, CHK-530), 1-[3-methoxy-4-(methylsulfonylamino)phenyl]cyclopropan carboxylic acid(11-8), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-1-[4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-1, CHK-533), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-1-[3-fluoro-4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-2, CHK-538), N-[2-(3,4-dimethylbenzyl)-3-pivaloxypropyl]-1-[3-methoxy-4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-3, CHK-541), N-[3-(3,4-dimethylphenyl)propyl]-1-[4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-4, CHK-590), N-[3-(3,4-dimethylphenyl)propyl]-1-[3-fluoro-4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-5), N-[3-(3,4-dimethylphenyl)propyl]-1-[3-methoxy-4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-6, CHK-632), N-(4-*tert*-butylbenzyl)-1-[4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-7, CHK-719), N-(4-*tert*-butylbenzyl)-1-[3-fluoro-4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-8, CHK-659), N-(4-*tert*-butylbenzyl)-1-[3-methoxy-4-(methylsulfonylamino)phenyl]cyclopropan carboxiamide(12-9, CHK-718).

4. The compound according to claim 1 represented by the following general formula (III), the pharmaceutically acceptable salt or the isomer thereof:



wherein,

R_1 to R_4 is independently at least one selected from a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, five or six-member heterocyclic ring providing that all of R_1 to R_4 are not hydrogen atoms simultaneously;

WO 2005/003084

PCT/KR2004/001641

R₅ and R₆ is independently at least one selected from a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms and phenyl or benzyl group optionally substituted with at least one selected from halogen atom, amine group and alkyl group having 1 to 6 carbon, providing that both of R₅ and R₆ are not hydrogen atom simultaneously;

B is a group selected from the group (I-1) to (I-6) defined in general formula (I) as set forth in claim 1;

the asteric mark * indicates a chiral carbon atom.

5. The compound according to claim 4 wherein said compound is at least one selected from the group consisting of;

N-(4-*tert*-butylbenzyl)-N'-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}thiourea(15-1, LJO-328), N-(4-*tert*-butylbenzyl)-N'-{1-[3-chloro-4-(methylsulfonylamino)phenyl]ethyl}thiourea(15-2, CHK-992), N-(4-*tert*-butylbenzyl)-N'-{1-[3-methoxy-4-(methylsulfonylamino)phenyl]ethyl}thiourea(15-3, CHK-575), N-(4-*tert*-butylbenzyl)-N'-{1-[3-(methoxycarbonyl)-4-(methylsulfonylamino)phenyl]ethyl}thiourea(15-4, YHS-187), N-(4-*tert*-butylbenzyl)-N'-{1-[3-carboxy-4-(methylsulfonylamino)phenyl]ethyl}thiourea(15-5, YHS-209), N-(4-*tert*-butylbenzyl)-N'-{(1R)-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(16-5, SU-388), N-(4-*tert*-butylbenzyl)-N'-{(1S)-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(16-6, SU-400), N-(4-*tert*-butylbenzyl)-N'-{(1R)-1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}thiourea(17-3, CJU-032), N-(4-*tert*-butylbenzyl)-N'-{(1S)-1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}thiourea(17-6, CJU-039), N-[(2R)-2-benzyl-3-(pivaloyloxy)propyl]-N'-{(1R)-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-1, MK-229), N-[(2S)-2-benzyl-3-(pivaloyloxy)propyl]-N'-{(1R)-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-2, MK-202), N-[(2R)-2-benzyl-3-(pivaloyloxy)propyl]-N'-{(1S)-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-3, MK-230), N-[(2S)-2-benzyl-3-(pivaloyloxy)propyl]-N'-{(1S)-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-4, MK-228), N-[2-(3,4-dimethylbenzyl)-3-(pivaloyloxy)propyl]-N'-{1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-5, LJO-388), N-[2-(3,4-dimethylbenzyl)-3-(pivaloyloxy)propyl]-N'-{(1R)-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-6, SU-472), N-[(2R)-2-(3,4-dimethylbenzyl)-3-(pivaloyloxy)propyl]-N'-{(1R)-1-[4-

WO 2005/003084

PCT/KR2004/001641

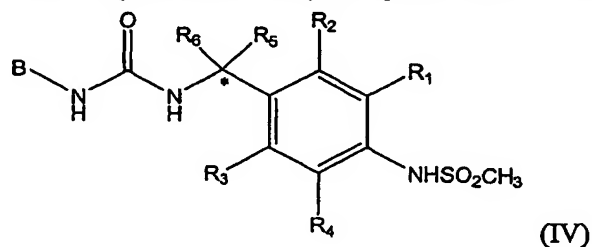
(methylsulfonylamino)phenyl]ethyl}thiourea(18-7, SU-512), N-[(2S)-2-(3,4-dimethylbenzyl)-3-(pivaloyloxy)prophyl]-N'-{(1R)-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-8), N-[2-(4-*tert*-butylbenzyl)-3-(pivaloyloxy)prophyl]-N'-{1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-9, LJO-401), N-[2-(4-*tert*-butylbenzyl)-3-(pivaloyloxy)prophyl]-N'-{1(R)-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-10, MK-296), N-[2(R)-(4-*tert*-butylbenzyl)-3-(pivaloyloxy)prophyl]-N'-{1(R)-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-11, MK-334), N-[2(S)-(4-*tert*-butylbenzyl)-3-(pivaloyloxy)prophyl]-N'-{1(R)-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-12, MK-298), N-[2-(3,4-(dimethylbenzyl)-3-(pivaloyloxy)prophyl]-N'-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-13, LJO-344), N-[2-(4-*tert*-butylbenzyl)-3-(pivaloyloxy)prophyl]-N'-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}thiourea(18-14, LJO-366), N-[(2R)-3-phenyl-1-pivaloyloxy-2-prophyl]-N'-[(R)- α -methyl-4-(methylsulfonylamino)benzyl]thiourea(19-13, SU-692), N-[(2S)-3-phenyl-1-pivaloyloxy-2-prophyl]-N'-[(R)- α -methyl-4-(methylsulfonylamino)benzyl]thiourea(19-14, SU-704), N-[(2R)-3-phenyl-1-pivaloyloxy-2-prophyl]-N'-[(S)- α -methyl-4-(methylsulfonylamino)benzyl]thiourea(19-15, SU-720), N-[(2S)-3-phenyl-1-pivaloyloxy-2-prophyl]-N'-[(S)- α -methyl-4-(methylsulfonylamino)benzyl]thiourea(19-16, SU-710), N-(4-*tert*-butylbenzyl)-N'-{1-[4-(methylsulfonylamino)-3-fluorophenyl]prophyl}thiourea(20-12, LJO-399), N-(4-*tert*-butylbenzyl)-N'-{1-[4-(methylsulfonylamino)-3-fluorophenyl]-2-methylprophyl}thiourea(20-13, LJO-402), N-(4-*tert*-butylbenzyl)-N'-{[4-(methylsulfonylamino)-3-fluorophenyl](phenyl)methyl}thiourea(20-14, LJO-403), N-(4-*tert*-butylbenzyl)-N'-{1-[4-(methylsulfonylamino)-3-fluorophenyl]-2-phenylethyl}thiourea(20-15, LJO-395), N-(4-*tert*-butylbenzyl)-N'-{1-methyl-1-[4-(methylsulfonylamino)phenyl]ethyl}thiourea(21-7, CHK-593), N-(4-*tert*-butylbenzyl)-N'-{1-methyl-1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}thiourea(21-8, CHK-660), N-(4-*tert*-butylbenzyl)-N'-{1-methyl-1-[3-methoxy-4-(methylsulfonylamino)phenyl]ethyl}thiourea(21-9, CHK-629), N-(4-*tert*-butylbenzyl)-N'-{1-[4-(methylsulfonylamino)phenyl]cycloprophyl}thiourea(22-7, CHK-579), N-(4-*tert*-butylbenzyl)-N'-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]cycloprophyl}thiourea(22-8), N-(4-*tert*-butylbenzyl)-N'-{1-[3-methoxy-4-(methylsulfonylamino)phenyl]cycloprophyl}thiourea(22-9, CHK-631).

6. The compound according to claim 1 represented by the following general formula

WO 2005/003084

PCT/KR2004/001641

(IV), the pharmaceutically acceptable salt or the isomer thereof:



wherein,

R_1 to R_4 is independently at least one selected from a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, five or six- member heterocyclic ring;

R_5 and R_6 is independently at least one selected from a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms and phenyl or benzyl group optionally substituted with at least one selected from halogen atom, amine group and alkyl group having 1 to 6 carbon, providing that both of R_5 and R_6 are not hydrogen atom simultaneously;

B is a group selected from the group (I-1) to (I-6) defined in general formula (I) as set forth in claim 1;

the asteric mark * indicates a chiral carbon atom.

7. The compound according to claim 6 wherein said compound is at least one selected from the group consisting of;

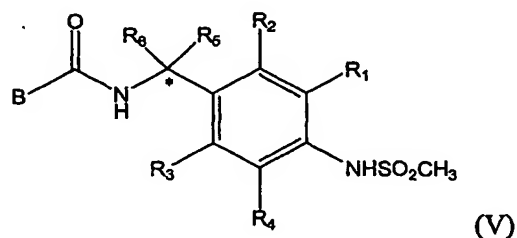
N-(4-*tert*-butylbenzyl)-N'-{1-[4-(methylsulfonylamino)phenyl]ethyl}urea (23-1, MK-82),

N-(4-*tert*-butylbenzyl)-N'-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}urea (23-2, MK-205).

8. The compound according to claim 1 represented by the following general formula (V), the pharmaceutically acceptable salt or the isomer thereof:

WO 2005/003084

PCT/KR2004/001641



wherein,

R_1 to R_4 is independently at least one selected from a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, five or six- member heterocyclic ring;

R_5 and R_6 is independently at least one selected from a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms and phenyl or benzyl group optionally substituted with at least one selected from halogen atom, amine group and alkyl group having 1 to 6 carbon, providing that both of R_5 and R_6 are not hydrogen atom simultaneously;

B is a group selected from the group (I-1) to (I-6) defined in general formula (I) as set forth in claim 1;

the asteric mark * indicates a chiral carbon atom.

9. The compound according to claim 8 wherein said compound is at least one selected from the group consisting of;

N-{1-[3-fluoro-4-(methanesulfonylamino)phenyl]ethyl}-3-(4-*tert*-butylphenyl)acetamide (24-1, KMJ-586),

N-{1-[3-fluoro-4-(methanesulfonylamino)phenyl]ethyl}-3-(4-*tert*-butylphenyl)propanamide (24-2, KMJ-552),

N-{1-[3-fluoro-4-(methanesulfonylamino)phenyl]ethyl}-3-(4-*tert*-butylphenyl)-2-propanamide (24-3, KMJ-570),

N-{1-[3-fluoro-4-(methanesulfonylamino)phenyl]ethyl}-3-(3,4-dimethylphenyl)propanamide (24-4, CHK-602),

N-{1-[3-fluoro-4-(methanesulfonylamino)phenyl]ethyl}-3-(3,4-dimethylphenyl)-2-propanamide (24-5, CHK-651),

N-{1-[3-fluoro-4-(methanesulfonylamino)phenyl]ethyl}-3-(4-chlorophenyl)propanamide (24-6, KMJ-534),

WO 2005/003084

PCT/KR2004/001641

N-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(4-chlorophenyl) -2-prophenamide (24-7, KMJ-558),

N-{1-[3-fluoro-4-(methylsulfonylamino)phenyl]ethyl}-3-(3,4-dimethylphenyl)buthanamide (24-8, CHK-647).

10. The compound according to any one of claims 1, 2, 4, 6 and 8 wherein said R_1 to R_4 is independently at least one selected from a hydrogen, halogen atom, cyano group, nitro group, lower alkyl amine, lower alkoxy group having 1 to 3 carbon atoms, carboxylic acid, hydroxamic acid, alkyl ester group having 1 to 6 carbon atoms, alkyl amide group having 1 to 6 carbon atoms, benzylamide group, five or six- member heterocyclic ring.

11. The compound according to any one of claims 1, 2, 4, 6 and 8 wherein said R_5 and R_6 is independently at least one selected from a hydrogen, hydroxyl group, amino group, straight or branched alkyl group having 1 to 6 carbon atoms, cycloalkyl group having 1 to 6 carbon atoms and phenyl or benzyl group optionally substituted with at least one selected from halogen atom, amine group and alkyl group having 1 to 6 carbon.

12. A pharmaceutical composition comprising the compound of general formula (I) as set forth in claim 1 as an active ingredient in amount effective amount for an antagonist of vanilloid receptor together with pharmaceutically acceptable carriers or diluents.

13. The pharmaceutical composition according to claim 12 wherein said pain disease is at least one selected from the group consisting of pain, acute pain, chronic pain, neuropathic pain, post-operative pain, migraine, arthralgia, neuropathies, nerve injury, diabetic neuropathy, neurodegeneration, neurotic skin disorder, stroke, urinary bladder hypersensitiveness, irritable bowel syndrome, a respiratory disorder such as asthma or chronic obstructive pulmonary disease, irritation of skin, eye or mucous membrane, ferveescence, coughing, stomach-duodenal ulcer, inflammatory bowel disease caused by the vanilloid receptor antagonistic activity.

14. A pharmaceutical composition comprising the compound of any one of claims 1, 2, 4, 6 and 8 as an active ingredient in amount effective for analgesic and anti-inflammation together with pharmaceutically acceptable carriers or diluents.